WHIRRAKEE

September 2010 Vol. 31 No. 8

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MONTHLY NEWSLETTER OF THE BENDIGO

FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.
Address for correspondence: PO Box 396, Bendigo 3552
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Office Bearers for 2009 - 2010

President	Jan Orr	5443 5668
Senior Vice President	*position vacant*	
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Secretary	Anne Bridley	5442 6188
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Treasurer	Rob Moors	54396254
Membership Officer	Anne Bridley	5442 6188
Excursion organiser	*position vacant*	
Syllabus organiser	Ben Goonan	
Librarian	Diana Collier (an assistant is still required)	5443 0137
Garden Convenor/Secretary	Matthew Comer	0409 162 627
Hall Management	Maurie Lewis (assisted by Rob Moors)	0407 427179
Whirrakee contact	Sabine Wilkens e-mail: s.wilkens@latrobe.edu.au	5443 2797

Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $34; Family $40; Concession: Single $28.50; Family $34. *Whirrakee* subscription only is $34.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The meeting starts with a 10 minute thing-of-the night natural history segment. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 6:00pm. Members of the Committee are the Office Bearer listed above and the following members: Bob Ruddick, Ben Goonan, Liz Graham, Glenise Moors, Joy Clusker, plus *one position vacant*

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club has one sub-group (the Fauna Study Group) and is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Senior Citizens Building. Working bees are advertised on the *Whirrakee* diary page.

Fauna Study Group: meets on the fourth Wednesday of the month at 7:30pm in the Golden Square Senior Citizens Building.

Chairman: John Burtonclay, Fadersons Lane, Mandurang (5439 5710)
Secretary: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
Equipment Officer: Maurie Lewis (0407 427179)

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5449 3479 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5449 3479.
To propose bird observing excursions please contact Kerrie Norris 5447 8017.

Front cover photo?...see page 2

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club

Vol. 31, No. 8, September 2010

Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.

Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note
September again, and our Annual General Meeting is before us. Nomination forms and membership renewal forms were sent out last month, and I hope you'll come along on Wednesday. If you are willing to lend a hand and need a little push – here it is! By the way, if anybody feels creative, or simply feels like a change, the job of Whirrakee editor is available, as are all positions on the executive and the committee. Be brave!
I do hope that most of us will be able to engage in core field nats business over the next few weeks. After an interesting winter with all those amazing fungi, we should have an interesting spring. The wattles are looking superb and always give you a boost when you need one.

Photographer: Joy Clusker
Black Rock, taken on the club excursion on August 14. There are a few more images from the outing to this interesting area on page 6.

Short Notices

September General Meeting Preview

In September we will have Dr Andrea Kodym from Melbourne University as our guest speaker. The topic is *Lepidosperma* (Sword Sedge) research
It is well worthwhile getting out into the weather on a Wednesday night for our excellent line-up of speakers, but especially this coming Wednesday, when we are celebrating our Annual General Meeting.

Weeds, weeds and more weeds

Help!. Several weeding session in the BFNC garden had to be cancelled due to the weather…

The next working bee is on Saturday 4th September at 1pm.

We will also have short sessions before both the general meeting on Wednesday 8th September at 5pm, and the committee meeting on Wed. 15th at 5pm each for about an hour, depending on the weather, of course.

All are welcome to come to any one or all of these sessions

Excursions

Great Dividing Trail Flora & Fauna Survey, Sandhurst Reservoir area.
Saturday 11 September 2010
We will be continuing the survey near Sandhurst Reservoir. We will be meeting AT THE CORNER OF PHYLLIS ST & THE CALDER HWY KANGAROO FLAT at 8:45am to go up to Sandhurst Reservoir. This is a half day excursion, and we will be back by 12:30pm.
Bring: binoculars, notebook, camera, morning tea, cold weather & rain gear.
Contact: Anne Bridley ph 5442 6188.

And still more fungi… ➔

The variety of fungi this season has been unbelievable. This photo over the page was taken on June 13 at Bullarto (it really deserved to be on the front page, but would not have been so striking in black and white).
Rod Orr tried to identify it and commented… 'depending on what the under-surface was like, it is (probably) either *Stereum hirsutum* (which has a reasonably smooth, uniform under-surface with no visible gills, teeth or pores - the upper surface has a yellow, wavy edge), or, *Trametes versicolor* (which has tiny pores on the underneath surface - the upper surface has a white edge) - they are both 'hairy' and have concentric colour zones on the upper surface. It's hard to say from the very small amount that the photo shows of the lower surface, but the white edge belongs to a *Trametes*, so it's most likely *Trametes versicolor*.

In Peter Ellis garden… ➔

The second photo on page 4 is of *Acacia flexifolia* (Bent-leaf Wattle), from the Whipstick. It has been flowering over the winter months and is just about finished. A. flexifolia is one of the few wattles that will keep as a cut flower in water. Peter Ellis got his plant from Marilyn Sprague, in fact he gave her cuttings of a slightly more intense gold colour (they are usually a paler lemon colour).

Trametes versicolor (?, see page 3) Photographer: Crawford Mouat. What does this remind you of?

←
Acacia flexifolia
Bent-leaf wattle, a winter-flowering shrub
Photographer: Peter Ellis

What else grows in Peter Ellis' garden? Here are more examples of indigenous plants suitable for a native garden

e.g. the strikingly blue *Dampiera* sp. ↓

Clematis microphylla obviously loves this spot…

close-up of the flowers ↓

Photographer: Peter Ellis

This is the deep pink form of *Philotheca verrucosus* (Bendigo wax-flower) ➔ that Kerri Norris found near her home at Kangaroo Gully. My mother has this growing in a large pot, seems likely to be better as a small tub plant than in the garden.

Images from August Club excursion to Black Rock Photographer: JoyClusker

A pile of bright red larvae…what could these be?

Matthew Comer (enjoying the wet weather?)

Leopard Orchid
Diuris pardina

And now for something completely different... Author and Photographer: Rod Orr

Jan & I were walking along the walking track through the Blackburn Creeklands Reserve on Sunday 29 May, when we were attracted by a noisy battle over a nest hollow, between the resident Rainbow Lorikeets and this Rose-ringed Parakeet. They were so busy with their dispute that I could walk up quite close to take photos with a 50mm lens.

We thought that the presence of this species in this area had probably been reported before and might have been old news but, just in case, I sent the details on to Birds Australia. I haven't heard anything yet, but will let you know what I find out from them. I sent the photo to Glenise Moors and Anne Bridley - Glenise had seen these birds before on a trip overseas and recognised the species so I could look up the right Websites for more details.
The Rainbow Lorikeets were not impressed as you can imagine but the invader kept at them and was very persistent indeed - perhaps a breeding event is planned for this location(?) if the invader (a male) can displace the current residents. These Parakeets are Winter breeders in England and have rapidly bred up to number ~10000 during the last 40 to 50 years.
They are Aviary Escapes - their natural occurrence is India and Northern Africa but they are obviously able to adapt to other, very different living conditions.

This plant is growing in a garden bed at our son's home in Melbourne - it simply appeared as a vigorous seedling which looked a bit like a wattle and was spared the fate of removal because I wanted to see it flower so that I could try to identify it. This year it has grown large enough to have its first flowers so I had no excuse and was expected to decide whether it was a native plant or an alien that should be removed.

I made lots of guesses and searched all of my reference books as well as lots of Websites, until, eventually, one of my guesses paid off & I was able to find the correct needle in the website haystack - I was always in the right section of the Flora, had guessed the Family correctly, and guessed close to the correct Genus, but it's hard to find the exact site isn't it?

(And it always looks so easy after you've found it!)
It's a native plant (of Western Australia), commonly called Cape Leeuwin Wattle although it's not an *Acacia* but, instead, used to be classified as an *Albizia*. I vaguely recall having come across it before but a long time ago and I had completely forgotten what it was, so I had to start all over again to identify it.
(this plant is growing in the Latrobe university garden, that's probably where Rod has seen it before...ed)

It's current Scientific Name is: *Paraserianthes lophantha* (Cape Leeuwin Wattle or, Cape Wattle or, Crested Wattle). It doesn't grow very tall (<10m) and is regarded as an interesting and useful small tree (except in Hawaii where it has become a major weed and is known as Mountain Albizia).

I haven't seen its pods yet but it has been given a temporary reprieve at least until it produces its seeds for me - if the growing conditions suit it too well and it outgrows its small garden bed, it's doomed.

August General Meeting, speaker: Ian Lunt
Topic: Our changing forests and woodlands

By Sabine Wilkens

Associate Professor Ian Lunt from Charles Sturt University braved the winter weather to talk to the club about research that he and his students have been involved in over the last few years. At CSU, Ian is associated with the Institute for Land, Water and Society, and this broad outlook is reflected in his research which crosses many boundaries.

For his talk, Ian presented us with three short stories

- Changes in woodlands over time
- How can we restore degraded areas?
- how are ecosystems changing over time?

How to infer tree densities prior to white settlement
How have woodland tree densities changed over the past 200 years? Due to clearing legislation in Queensland, this remains a controversial topic as we continue to grapple with the notion of 'original vegetation'. Proponents of clearing argue that most current vegetation is regrowth anyway, so not natural. The more traditional view is that the original vegetation was denser than today and major clearing after the 1800s led to the current degraded state including the woes of the Murray Darling Basin. Unfortunately, there is little evidence for what our original vegetation looked like, and nobody can base their arguments for or against clearing on historical facts.
In this study, Ian and his students looked for ecosystems with persistent old stumps, that might reveal tree densities prior to white settlement. They found forests that had been managed for cypress pines (*Callitris*) and counted the oldest, hand-cut stumps. Past densities revealed by this technique ranged from 20 – 80 trees per hectare, which is less dense than current stands of white cypress pine. A surprising finding was that the original forests, prior to 1800, which today are dominated by *Callitris*, would have been dominated by eucalypts, so this loss of habitat and food reserves would have been a significant change for the forest animals.
A similar finding was reported from the Millewa forest, using the same technique. It was found that today's total area of trees is actually similar to that 200 years ago, but today, trees are much more dense due to the existence of many small trees (as opposed to fewer large ones in the past). It may have been regular fires, either natural or started by aborigines, that kept the densities low in the past.

The difficulty of restoring degraded ecosystems
For this study, Ian and his students looked at white box woodland in NSW, which exists in few remnant patches, most of which are degraded with many persistent weeds like capeweed, Pattersons curse and annual brome grass. These weeds are so smothering, that they stop any recruitment of natives and thus

any natural recovery. Early research focussed on using disturbance as a management tool, while more recent research has turned its attention to nutrient levels in the soil. It is clear that nutrient levels in these disturbed patches is higher than normal, and this gives exotics a competitive edge. So the question is, can we reduce nutrient levels to allow natives to reclaim the land, and if so, how lasting would such an effect be? Ian surprised everybody in the audience with the revelation that pouring sugar on the weed infested areas, actually reduces nutrients. How so? Sugar presents an easily metabolised food source for bacteria, and while these feast on the sugar and grow rapidly they also use up the excess nitrogen in the soil, thus making it temporality unavailable for weeds. How much sugar? Rather a lot. Ian talked about a bucket of sugar for a 5 x 5m area, so this is certainly not a sustainable proposition. It works best if the sugar is put on just after the autumn break when weeds are just beginning to grow.

After a while, when the sugar runs out, all those soil microbes will starve and re-release the nitrogen into the soil. If things work out really well, some natives have taken hold of that patch and actually reduce nitrogen levels in the soil, thus preventing weeds from returning? Some native grasses may well be suited to this approach. A radical alternative is to scalp the soil altogether and dispose of it.

Current and future vegetation changes

What does our country look like today compared to 50 year ago? What will the country look like in 50 or 100 year? What sort of large-scale vegetation changes are occurring right now? These are big questions and they need a landscape-scale study to answer them. Such studies over large areas as well as over time are possible today due to relatively accessible satellite imagery. Ian reported that the two large-scale drivers of vegetation change, the removal of livestock and land use changes that are pushing out traditional agriculture (e.g. subdivisions), both cause an increase in the growth of woody shrubs. Satellite images from 1970 compared to 2000 in the Heathcote-Rushworth forest area, revealed 42% versus 66% shrub cover respectively, and this trend is shown in other areas of the state as well (e.g. Doctor's swamp).

Indeed, Ian's team has shown that many types of vegetation show this increase in woody cover, even only over the last 16 years (1989 – 2005) (riverine woodland (+ 09.2%), herb-rich woodland (+ 7.6%), plains woodland (+ 6.7%) and coastal vegetation (+ 5.9%).

Causes may be varied but remain speculative (age of farmers, drought, wool process) but change of land from traditional agriculture to rural amenity zones must be a large contributor. Is such 'wild' regrowth of woody vegetation a good thing? Does it increase habitat for wildlife and if yes, is it actually of good quality (or does it just mean an increase in fire risk)? Will it develop into mature box-ironbark forest? How does this 'uncontrolled' regeneration compare to carefully crafted revegetation plots? Will it contribute to the overall Biolinks plan in Victoria? What do landholders think about it all?

Ian is hoping to answer some of these questions over the next few years…so watch this space.

I was thoroughly amazed at all that large-scale work going on to answer some of the very difficult questions of changing landscapes. On the other end of the scale, I am dying to try out the 'sugar method', even though it is not recommended as a proper method to control weeds. From what Ian showed, the results were quite dramatic and even just seeing this would be quite wonderful. Ecology in action!

I am very glad I came out on that cold night, this was a very interesting and inspiring talk.

Appeal for help with Kennington Reservoir history project

Bill and Carol Holsworth are currently compiling a history of Kennington Reservoir and are requesting help with any items that could contribute to this project. 'Kenny Res' is the oldest Reservoir in the region, which is still being used for its original purpose.

Bendigo Field Naturalists Club – Speaker Syllabus for the remainder of 2010

DATE	PRESENTER	TITLE
8/09/10	Dr Andrea Kodym, The University of Melbourne	"Lepidosperma (Sword-sedge) Research"
13/10/10	Rodger Elliot AM, Author and Horticulturalist	"The 35-year Journey, Australian Plants A – Z"
10/11/10	Neil Macfarlane, Victorian Malleefowl Recovery Group Inc.	"The Malleefowl Recovery Project"
8/12/10	Rod Orr, Bendigo Field Naturalists Club	"The Canning Stock Route: Plants"

Diary

The General, Bird Observers Group and Fauna Study Group meetings are held at the Golden Square Senior Citizens Building, Old High Street, Golden Square, unless otherwise indicated.

General Meetings

Wednesday, September 8 7.30pm
Dr Andrea Kodym from Melbourne University will talk about Sword Sedge (*Lepidosperma*) research.

Excursions

Great Dividing Trail Flora & Fauna Survey, Sandhurst Reservoir area.
Sat 12 June 2010. We will be continuing the survey which we started last year. Meet at clubrooms at 8:30 am. This is a half day excursion, and we will be back by 12:30pm.
Bring: binoculars, notebook, camera, morning tea, cold weather & rain gear.
Contact: Anne Bridley ph 5442 6188

Fauna Group

This group normally meets (in the clubrooms) on the fourth Wednesday of the month at 7.30pm. New and seasoned Club members are most welcome to attend.

Next Garden Working Bee
will take place on

Saturday September 4, at 1pm.

See page 3 for other short working bees planned before our next club meetings. Urgent weeding is required, so help is needed

All more than welcome

Wildlife Rescue & Information Network Inc.

W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.

Kooyoora Wildflower Show

Sat & Sun 18 - 19 September, Rheola Hall
9:30 - 4 pm daily.

Photographic Competition

Subjects: landscape, native flora & fauna,
Photo Location: Loddon Shire
Winner to be announced at the Kooyoora Wildflower Show
Entries close Sunday 12th September 2010.
Contact: Rob Scholes, 0427 190 339 email cvosrr@iinet.net.au
Entry forms at www.loddon.vic.gov.au

Naturally Loddon -a wonderland in Spring

4 Sep - 3 Oct
A month of environmental events in the Loddon Shire.
Includes: Sat 4 & Sun 5 working bee at Bush Heritage Property near Wychitella.
Fri 24 Sep: biolinking Australia, on ground action with Greenhouse Balance
Sun 26 Sep: Northern United Forestry Group
Wed 29 Sep: Leaghur SP with Paul Haw
Thurs 30 Sep: Boort wetlands with Paul Haw
Contact: Loddon Visitor Information Centre, 5494 3489 www.loddon.vic.gov.au

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SEANA Spring Camp 2010

Foster North, South Gippsland
Friday 15 - Monday 18 October 2010
Registration & deposit due by 16 July 2010
Contact: Wendy Savage ph. 5634 2246, email wsavage@dcsi.net.au or Phil Rayment ph. 5174 1730, email philrayment@dcsi.net.au

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